

**15th Annual International Sustainable Development Research Conference  
July 5-8, 2009**

***"Taking up the Global Challenge: Analysing the implementation of  
innovations and governance for Sustainable Development"***

**CALL FOR PAPERS**

**Track nr 4D:** *Applying Material efficiency, recycling and new bio based materials*

Track chair: Prof. Dr. Raimund Bleischwitz (Wuppertal Institute, Germany),  
Harriette Bos (A&F/Uni Wageningen), Dr. Martin Patel (Utrecht University,  
the Netherlands)

Today, declining profit margins and fierce competition call for economically more viable options of using materials and energy. At the same time, there is an urgent need to implement technologies that are sustainable from an environmental and social point of view. A strategy that can potentially serve all these three sustainability dimensions is the radical efficiency improvement of resource, processing and material efficiency (including production systems with closed cycles). The OECD handbook (2008) on material flows and resource productivity offers practical guidelines how this can be done at a larger scale.

The topic of this session is therefore the application of material efficiency, recycling and new bio-based materials. Areas may include construction, mobility, consumer goods and food, and the interaction between those application areas. This track session has the ambition to provide a full overview of the latest activities and current understanding in the field, including cutting-edge activities and systems innovation in R&D and production. Analyses presented should be comparative in nature, including covering two or more technological options. Both, papers reflecting the current status as well as prospective analyses are very welcome. Furthermore, analyses on the wider effects such as land use implications and impact on other scarce resources may be presented. Economic analysis on issues such as a possible rebound effect, drivers and barriers for materials efficiency, incentive schemes, macro-economic impacts also fit to in that track.

Selection criteria for papers submitted in this track are the

- novelty of the technical measure (technical innovation, functional innovation or system innovation),
- reliability of assessment methodology (preferably integrated assessment covering environmental, economical and social aspects,
- robustness of socio-economic analysis,
- concluding thoughts on ramping up such innovation at a larger scale.

Please look at the detailed instructions and deadlines for submitting your abstract and paper, using the Submission & guidelines button at the left side.